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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,869	01/28/2005	Akio Taniguchi	5404/95	5235

757 7590 12/27/2005

BRINKS HOFER GILSON & LIONE  
P.O. BOX 10395  
CHICAGO, IL 60610

EXAMINER
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MULLIS, JEFFREY C

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/522,869

Applicant(s)

TANIGUCHI ET AL.

Examiner

Jeffrey C. Mullis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 23-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 26-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4-4-05</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-22 and 26-29, drawn to a block copolymer.

Group II, claim(s) 23-25, drawn to a process for producing an acrylic block copolymer.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Madeline (US 4,925,765), suggests applicants product in the examples and at column 3, lines 16-23; note also the remaining prior art relied upon which provides evidence that applicants product was known at the time of filing.

During a telephone conversation with Richard Lione on 12-6-05 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-22 and 26-29. Affirmation of this election must be made by applicant in replying to this Office action. Claims 23-25 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12, 15, 22 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madeleine (US 4,925,765).

Patentees disclose a block copolymer containing a block "A" which is preferably methacrylate or acrylate and a block "B" which is preferably methacrylate (column 3, lines 16-23) which is treated to form anhydride functionality from the (meth) acrylic units (Example 1). No examples of a block copolymer are present in which one block is acrylic and the other methacrylic. However, choice of such from the disclosure of the patent would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in the expectation of adequate results, absent any showing of surprising or unexpected results.

Claims 1-12, 16, 18-22 and 26-29 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Miyashita et al. (US 2001/0044024).

Patentees disclose a process in which an adhesive containing two different acrylic polymer segments (ie blocks) is produced (abstract). Note paragraphs 53-57 for production of polymer "P-1" with an acrylate – methacrylate block copolymer containing some unesterified (meth) acrylic monomer is produced. Note "EXAMPLE 1" for heating in an extruder. Since applicants as well as Madeleine, cited above both utilize similar processes for creating anhydride functionality in a methacrylic block copolymer, anhydride functionality would reasonably appear to be inherently produced in the reference examples. As the material is an adhesive it can reasonably be said to embrace a "seal". As films are produced, an automotive part can reasonably be said to be embraced, such as a film for covering a dashboard or protecting a PVC layer in a car.

When the reference discloses all the limitations of a claim except a property or function, and the Examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention, basis

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exists for shifting the burden of proof to applicant. Note In re Fitzgerald et al. 619 F. 2d 67, 70, 205 USPQ 594, 596, (CCPA 1980). See MPEP § 2112-2112.02.

Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyashita, cited above.

Miyashita do not disclose any examples in which the acrylic monomer block contains the combination of monomers of claims 13-15. However patentees disclose in paragraph 30 that a combination of monomers including those of applicants may be used to form segments. Hence choice of applicants monomer combination would have been obvious to a practitioner having an ordinary skill in that art at the time of the invention in the expectation of adequate result, absent any showing of surprising or unexpected results.

Claims 1-12, 16, 18-22 and 26-29 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kazuhiko et al. (electronic translation of JP 11-349782).

Patentees disclose a process in which a block copolymer having a polyacrylate block and a polymethacrylate block is extruded at 240 degrees centigrade to form a sheet and as applicants as well as Madeleine, cited above both utilize similar processes for creating anhydride functionality in a methacrylic block copolymer, anhydride functionality would reasonably appear to be inherently produced in the reference examples. As the material is an adhesive it can reasonably be said to embrace a "seal". As films are produced, an automotive part can reasonably be said to be embraced, such as a film for covering a dashboard or protecting a PVC layer in a car.

When the reference discloses all the limitations of a claim except a property or function, and the Examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention, basis exists for shifting the burden of proof to applicant. Note In re Fitzgerald et al. 619 F. 2d 67, 70, 205 USPQ 594, 596, (CCPA 1980). See MPEP § 2112-2112.02.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-22 and 26-29 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 and 21-46 of copending Application No. 10/503,024. Although the conflicting claims are not

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identical, they are not patentably distinct from each other because heating of the block copolymers of the application claims as recited by the application claims would reasonably appear to generate the anhydride structure contained in the block copolymers of the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-22 and 26-29 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2, 3, 5, 7-9 and 11 of copending Application No. 10/477,868. Although the conflicting claims are not identical, they are not patentably distinct from each other because the genus of the application claims is disclosed to include thermal dehydration induced anhydride containing block copolymers at paragraph 185 of the published application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-22 and 26-29 are rejected under 35 U.S.C. 102(a) as being anticipated by Kakeda et al, DERWENT abstract of Chiba, DERWENT abstract ACC-NO 2003-120654 of patent family of WO 200292696 and US 20040147674 (published application of 10/477,868, cited above).

Note paragraph 185 of the published US application for dehydration produced anhydride containing block copolymers and the abstract disclosing methacrylate



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block/acrylate block containing block copolymers and note the DERWENT abstract indicating that WO 200292696, filed 11-21-2002 is a member of the same patent family as the published US application.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claims 1-12, 15-22 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matyjaszewski et al (either US 2002/0193538 or 20040204556) in view of Southwick (US 5,403,658).

Matyjaszewski et al. disclose polyacrylate-block-polymethacrylate block copolymers (see '538 at paragraph 101 and '556 at paragraph 502). Note the abstract of '538 for use as adhesives and paragraph 73 of '556 where crosslinking is disclosed. Use of ATRP is disclosed in the abstracts.

Southwick discloses an adhesive composition which can be crosslinked using methacrylate anhydride functionality in order to confer heat resistance at column 7, lines 40-53 and the paragraph bridging columns 10 and 11.

Matyjaszewski et al. do not disclose introduction of anhydride units derived from methacrylate units. However introduction of such into the product of '538 would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in the expectation of conferring the heat resistance in an adhesive as disclosed by the secondary reference or achieving the crosslinking desired by '556 and means for

achieving crosslinking disclosed by Southwick absent any showing of surprising or unexpected results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey C. Mullis whose telephone number is 571 272 1075. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seidleck James can be reached on 703 308 2462. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeffrey C. Mullis  
J Mullis  
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JCM

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12-16-05

Jeffrey Mullis  
Primary Examiner  
Art Unit 1711

A handwritten signature in black ink, consisting of a large, stylized 'J' followed by a series of loops and a final horizontal stroke.